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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,914	12/11/2000	David Cheo	0942.5010002/RWE/SGW	2341
7:	590 03/18/2002			
STERNE. KESSLER, GOLDSTEIN & FOX P.L.L.C.			EXAMINER	
Suite 600 1100 New Yorl	k Avenue, N.W.	KETTER, JAMES S		
Washington, DC 20005-3934			ART UNIT	PAPER NUMBER
			1636	
			DATE MAILED: 03/18/2002	7

Please tind below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)			
		09/732,914	CHEO ET AL.			
		Examiner	Art Unit			
		James Ketter	1636			
Period fo	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address			
- Exte after - If the - If NO - Failu - Any i	MAILING DATE OF THIS COMMUNICATION.  nsions of time may be available under the provisions of 37 CFR 1.13  SIX (6) MONTHS from the mailing date of this communication.  period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from	nely filed s will be considered timely. the mailing date of this communication.			
1)	Responsive to communication(s) filed on					
2a)□		— · s action is non-final.				
3)						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4)🖂	Claim(s) 1-142 is/are pending in the application	1.				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)	6) Claim(s) is/are rejected.					
7)	Claim(s) is/are objected to.					
8)⊠	Claim(s) 1-142 are subject to restriction and/or	election requirement				
Application	on Papers					
9) 🗌 7	The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)□ T	he proposed drawing correction filed on	is: a)[☐ approved b)[☐ disapprov	ed by the Examiner.			
_	If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>						
	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
	14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a)	The translation of the foreign language provicts the translation of the foreign language provicts that the translation is made of a claim for domestic	sional application has been recei	ived.			
2) Notice 3) Informa	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal Pa	PTO-413) Paper No(s) tent Application (PTO-152)			
U.S. Patent and Trac PTO-326 (Rev.		on Summary	Part of Paper No. 7			

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claim1-8, 11-19, 21-54, 56-60, 62-73, 76-100 and 103-123, drawn to methods of recombining DNA molecules, classified in class 435, subclass 91.41.
- II. Claims 9, 10, 20, 55, 61, 74, 75, 101 and 102, drawn to nucleic acid molecules and compositions and cells comprising said molecules, classified in class 536, subclass 23.5, and class 435, subclass 252.33.
- III. Claims 128-133, drawn to methods of attaching a compound to a support, classified in class 435, subclass 6.
- IV. Claims 134 and 135, drawn to a support with a molecule attached, unclassifiable.
- V. Claims 136-138, drawn to methods of enzymatically combining molecules, classified in class 435, subclass 41+.
- VI. Claims 139-142, drawn to kits comprising a nucleic acid and two enzymes, classified in class 435, subclass 194.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by direct chemical synthesis or ligation of smaller nucleic acid molecules.

Inventions of Groups I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation,

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different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation and different effects (results) in that Group III involves broadly the enzymatic attachment of any compound to any support. Group I is drawn to attaching nucleic acids to each other. The functions of the resultant products would appear to be different.

Inventions of Groups I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a method of making a first product and to a second product. As such, there is no relationship between the inventions.

Inventions of Groups I and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a method of joining nucleic acid molecules in one instance, and to a method of joining two molecules broadly, optionally followed by joining said molecules to a nucleic acid. The functions of the resultant products would appear to be different.

Inventions of Groups VI and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product kits may be used for ligase-based cloning, or for

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sequencing or nucleic acid detection methods, in view of the wide range of enzymes encompassed.

Inventions of Groups II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a method of making a first product and to a second product. As such, there is no relationship between the inventions.

Inventions of Groups II and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation and functions.

Inventions of Groups II and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a first product, and to a method of making a second product. As such, there is no relationship between the inventions.

Inventions of Groups II and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a resultant product nucleic acid, and to a kit comprising enzymes, which are chemical entities distinct from nucleic acids, as well as to nucleic acids

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which represent reactants with respect to the nucleic acid products of Group II. As such, there is no relationship between the inventions.

Inventions of Groups III and IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product could be made by direct chemical attachment (non-enzymatic) of the compound to the support.

Inventions of Groups III and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation and different effects (results) in that Group III involves broadly the enzymatic attachment of any compound to any support. Group V is drawn to attaching molecules of any compound to molecules of any other compound. The functions of the resultant products would appear to be different.

Inventions of Groups VI and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product kits may be used for ligase-based cloning, or for sequencing or nucleic acid detection methods, in view of the wide range of enzymes encompassed.

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Inventions of Groups IV and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a first product, and to a method of making a second product. As such, there is no relationship between the inventions.

Inventions of Groups IV and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to a resultant product support attached to a molecule, and to a kit comprising enzymes. As such, there is no relationship between the inventions.

Inventions of Groups VI and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product kits may be used for ligase-based cloning, or for sequencing or nucleic acid detection methods, in view of the wide range of enzymes encompassed.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Certain papers related to this application may be submitted to the directly to the Examiner by facsimile transmission at (703) 746-5155. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993)(see 37 CFR ' 1.6(d)). To send the facsimile to the Art Unit instead, the Art Unit 1636 Fax number is (703) 305-7939. NOTE: If Applicant does submit a paper by fax to this number, the Examiner must be notified promptly, to ensure matching of the faxed paper to the application file, and the original signed copy should be retained by Applicant or Applicant's representative. (703) 308-4242 or (703) 305-3014 may be used without notification of the Examiner, with such faxed papers being handled in the manner of mailed responses. Applicant is encouraged to use the latter two fax numbers unless immediate action by the Examiner is required, e.g., during discussions of claim language for allowable subject matter. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

(9:00-6:30), with alternate Fridays off.

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Any inquiry concerning this communication or earlier communications from the Examiner with respect to the examination on the merits should be directed to James Ketter whose telephone number is (703) 308-1169. The Examiner normally can be reached on M-F

Questions regarding formalities and processing of the case should be directed to Zeta Adams, whose telephone number is (703) 305-3291.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Remy Yucel, can be reached at (703) 305-1998.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

Jsk March 15, 2002

JAMES KETTER
PRIMARY EXAMINER